MONODISPERSE TELECHELIC AMINE-BASED POLYUREAS FOR USE IN GOLF BALLS

ABSTRACT

A golf ball including a core and a cover layer including a curing agent and a polyurea prepolymer formed from a polyisocyanate and a monodisperse telechelic polyamine having a polydispersity of from about 1.0 to about 1.3, and having the formula:

$$T--Z_n--C--Y--C--Z_n--T$$

10

15

5

where \mathbf{Y} is at least one molecule or mixtures of molecules having at least two independently polymerized vinyl groups, such as 1,3-divinylbenzene or 1,4-divinylbenzene; \mathbf{C} is a hydrogenated or unsaturated block derived by anionic polymerization of at least one monomer selected from the group consisting of conjugated dienes, alkenyl-substituted aromatics, and mixtures thereof; \mathbf{Z}_n is a branched or straight chain hydrocarbon connecting group which contains $\mathbf{n}=1\text{-}50$ carbon atoms; and \mathbf{T} is primary or secondary amine.